AMENDMENTS TO THE CLAIMS

1. (Currently amended) [[A]] In a network management apparatus communicatively

coupled to a network, a method for processing network management data in a network

management system that generates Simple Network Management Protocol (SNMP) and

 $\underline{logging_events[[,]]} \ for \ presentation \ in \ an \ event \ log \ display \ to \ a \ user[[,]] \ when \ \underline{SNMP} \ event$

conditions are detected during the monitoring of a network, the method comprising:

receiving network management data relating to an SNMP a given event condition

from the network;

adding logging to the event log display a normal event log entry to the event log

display corresponding to the given event condition, upon a determination that fewer than a

first number of event log entries each corresponding to an event condition equivalent to the

given event condition have been logged to the event log display during a first time period the

normal event log entry corresponding to the event, when a number of preceding equivalent

events is less than a predetermined number in a preceding time period:

logging to the event log display an event log entry corresponding to the given event

condition and marking the event log entry as a recurring event log entry, upon a

determination that at least the first number of event log entries each corresponding to an

event condition equivalent to the given event condition have been logged to the event log

display during the first time period responsive to determining an event corresponds to an

already recurring event, updating at least one existing log event entry by marking the at least

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one existing log event entry as recurring; and

McDonnell Boehnen Hulbert & Berghoff LLP 300 South Wacker Drive Chicago, Lunois 60606 Tri Fehone (312) 913-0001 maintaining the event log display by excluding from the event log display an indication

of the event from the event log display when an event log entry corresponding to a particular

event condition, upon a determination that (i) a recurring event log entry corresponding to an

event condition equivalent to the particular event condition has already been logged and (ii) at

least a second number of event conditions equivalent to the particular event condition have

been received during a second time period (i) the event corresponds to an already recurring

event and (ii) the number of preceding equivalent events is greater than the predetermined

number in the preceding time period, wherein excluding an indication of the event from the

event log display comprises excluding an indication of a normal event log entry to the event

log display, wherein the normal event log entry is a log entry indicating the event does not

correspond to the already recurring event.

2-3 (Cancelled)

4 (Currently amended) A method as claimed in claim 1, wherein marking the event log

entry as a recurring event log entry comprises further comprising adding a time stamp to the

recurring event log entry the event data of the recurring event, the time stamp indicating the

a time of the subsequent occurrence of the given event condition.

5. (Currently amended) A method as claimed in claim 1, wherein the preceding first

time period is an immediately preceding predetermined time period precedes receipt of an

event condition.

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6-7. (Cancelled)

8. (Currently amended) [[A]] In a network management apparatus communicatively

coupled to a network, a method for processing a network management data in a network

management system that generates Simple Network Management Protocol (SNMP) and

logging events[[,]] for presentation in an event log display to a user[[,]] when SNMP event

conditions are detected during the monitoring of a network, the method comprising:

receiving network management data relating to an SNMP from the network indicating

that a given event condition has occurred;

determining whether the <u>a</u>monitored characteristic for the SNMP of the given event

condition is in a recurring state, a recurring state corresponding to a presence in the event

log display of a recurring event log entry that includes an indication of at least a first number

of event conditions, each equivalent to the given event condition, having been received during

a first time period;

responsive to determining that the monitored characteristic is in a recurring state,

determining whether the given event condition has occurred more than a first predetermined

second number of times in a first preceding during a second time period; and

responsive to determining that the event condition monitored characteristic is in a

recurring state and that the given event condition has occurred more than a second number

of times during a second time period has occurred more than the first predetermined number

of times in the first preceding time period. (a) updating at least one existing log event entry

by marking the at least one existing log event entry as recurring and (b) preventing the

McDonnell Boehnen Hulbert & Berghoff LLP 300 South Wacker Drive Chicago, Lunois 60606 Tri Fehone (312) 913-0001 4

ATTORNEY DOCKET No.: 01-491 S/N: 09/897,518 Fuing Date: July 2, 2001 $\label{eq:condition} \mbox{received} \ \ \mbox{\underline{network}} \ \ \mbox{\underline{management}} \ \mbox{\underline{data}} \ \ \mbox{\underline{relating to the event condition}} \ \mbox{from being presented in}$

the event log display to the user.

9-11. (Cancelled)

12. (Previously presented) A method as claimed in claim 8, further comprising:

responsive to determining that the monitored characteristic is in a recurring state, adding to

event data of the event in the recurring state the recurring event log entry a time stamp

marking a time at which the network management data was received time of the received

data relating to the event condition.

13. (Currently amended) A method as claimed in claim 8, the method further comprising:

responsive to determining that the monitored characteristic is in a recurring state and that

the given event condition has not occurred more than a second number of times during a

second time period, generating an normal event entry for presentation in the event log

display to the user when it is determined that the event condition has not occurred more than

the first predetermined number of times in the first immediately preceding time period.

14. (Currently amended) A method as claimed in claim 13, wherein the generated normal

event log entry is not a recurring event log entry.

15. (Currently amended) A method as claimed in claim 8, further comprising: responsive

to determining that the monitored characteristic is not in a recurring state, wherein it is

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determined that the monitored characteristic for the event condition is not in a recurring

state, the method further comprises determining whether a second predetermined at least

the first number of event conditions, each equivalent to the given event condition, has been

received during the first time period number of equivalent events have been generated in a

second preceding time period.

16. (Currently amended) A method as claimed in claim 15, the method further

comprising: responsive to determining that at least the first number of event conditions,

each equivalent to the given event condition, has been received during the first time period,

generating a recurring event log entry in the event log display when it is determined that the

second predetermined number of equivalent events have been generated in the second

preceding time period.

17. (Currently amended) A method as claimed in claim 16, further comprising:

subsequent to generating a recurring event log entry in the event log display,

receiving particular network management data indicating that a particular event condition has

occurred, the particular event condition being equivalent to the given event condition; and

preventing the particular network management data after the step of generating a

recurring event, the method further comprises receiving data relating to a subsequent

occurrence of the event condition, and preventing a subsequent event from being presented

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in the event log display to the user.

McDonnell Boehnen Hulbert & Berghoff LLP 300 South Wacker Drive Chicago, Lunois 60606 ATTORNEY DOCKET No.: 01-491 S/N: 09/897,518 FILING DATE: JULY 2, 2001 18. (Currently amended) A method as claimed in claim 17, further comprising: adding to

the recurring event log entry a time stamp marking a time at which the particular network

management data was received, after the step of receiving data relating to a subsequent

occurrence of the event condition, adding a time stamp to the event data of the recurring

event, the time stamp indicating the time of the subsequent occurrence of the event

condition.

19 (Currently amended) A method as claimed in claim 15, further comprising:

responsive to determining that fewer than the first number of event conditions, each

equivalent to the given event condition, has been received during the first time period, the

method further comprising generating an a normal event entry for presentation in the event

log display to the user when it is determined that the second predetermined number of

equivalent events have not been generated in the second preceding time period.

20 (Currently amended) A method as claimed in claim 15, wherein each of the first or

time period and the second preceding time period is an immediately preceding

predetermined time period precedes receipt of the network management data.

21. (Currently amended) A tangible computer readable medium including a computer

program for carrying out the steps of having stored thereon computer-executable instructions

that, if executed by a network management apparatus, cause the network management

apparatus to perform a method comprising:

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ATTORNEY DOCKET No.: 01-491 S/NF 00/807 518 FILMS DATE: JULY 2, 2001 receiving network management data relating to an SNMP <u>a given</u> event condition

from the network;

adding logging to the event log display a normal event log entry to the event log

display corresponding to the given event condition, upon a determination that fewer than a

first number of event log entries each corresponding to an event condition equivalent to the

given event condition have been logged to the event log display during a first time period the

normal event log entry corresponding to the event, when a number of preceding equivalent

events is less than a predetermined number in a preceding time period;

logging to the event log display an event log entry corresponding to the given event

condition and marking the event log entry as a recurring event log entry, upon a

determination that at least the first number of event log entries each corresponding to an

event condition equivalent to the given event condition have been logged to the event log

display during the first time period responsive to determining an event corresponds to an

already recurring event, updating at least one existing log event entry by marking the at least

one existing log event entry as recurring; and

maintaining the event log display by excluding from the event log display an indication

of the event from the event log display when an event log entry corresponding to a particular

event condition, upon a determination that (i) a recurring event log entry corresponding to an

event condition equivalent to the particular event condition has already been logged and (ii) at least a second number of event conditions equivalent to the particular event condition have

been received during a second time period (i) the event corresponds to an already recurring

event and (ii) the number of preceding equivalent events is greater than the predetermined

number in the preceding time period, wherein excluding an indication of the event from the

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ATTORNEY DOCKET No.: 01-491 S/N: 09/897,518 FING DATE: JULY 2, 2001 event log display comprises excluding an indication of a normal event log entry to the event

log display, wherein the normal event log entry is a log entry indicating the event does not

correspond to the already recurring event.

(Cancelled)

23. (Currently amended) A network management apparatus for configured for monitoring

a network, and for processing network management data, and generating Simple Network

Management Protocol (SNMP) logging events[[,]] for presentation in an event log display to a

user[[,]] when SNMP event conditions are detected, the apparatus comprising:

a processor; and

memory configured to store computer-executable instructions that, if executed by the

processor, cause the network management apparatus to perform functions comprising:

receiving a given event condition from the network;

logging to the event log display a normal event log entry corresponding to the given

event condition, upon a determination that fewer than a first number of event log entries each

corresponding to an event condition equivalent to the given event condition have been logged

to the event log display during a first time period;

logging to the event log display an event log entry corresponding to the given event

condition and marking the event log entry as a recurring event log entry, upon a

determination that at least the first number of event log entries each corresponding to an

event condition equivalent to the given event condition have been logged to the event log

display during the first time period: and

McDonnell Boehnen Hulbert & Berghoff LLP 300 South Wacker Drive Chicago, Lunois 60606 Tri Fehone (312) 913-0001 ATTORNEY DOCKET No.: 01-491 S/N: 09/897,518 FILING DATE: JULY 2, 2001 excluding from the event log display an event log entry corresponding to a particular

event condition, upon a determination that (i) a recurring event log entry corresponding to an

event condition equivalent to the particular event condition has already been logged and (ii) at

least a second number of event conditions equivalent to the particular event condition have

been received during a second time period

a processor for receiving network management data relating to an SNMP event

condition, and for determining whether a predetermined number of equivalent SNMP events

have been generated in a preceding time period, designating the event as being in a

recurring state when the predetermined number of equivalent SNMP events have been

generated in the preceding time period, responsive to determining an event corresponds to

an already recurring event, updating at least one existing log event entry by marking the at

least one existing log event entry as recurring, and ignoring subsequent event conditions

associated with recurring events as long as the event condition remains in a verified recurring

state.

24 (Cancelled)

25 (New) The method of claim 1, wherein the network management data is Simple

Network Management Protocol (SNMP) management data, and the given event condition is an

SNMP event condition.

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 (New) The method of claim 8, wherein the network management data is Simple Network Management Protocol (SNMP) management data, and the given event condition is an

SNMP event condition.

 $\ \ \, \hbox{(New)} \ \ \, \hbox{The tangible computer readable medium of claim 21, wherein the given event} \\$

condition is an SNMP event condition.

28. (New) The network management apparatus of claim 23, wherein the network

management data is Simple Network Management Protocol (SNMP) management data, and

the given event condition is an SNMP event condition.

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